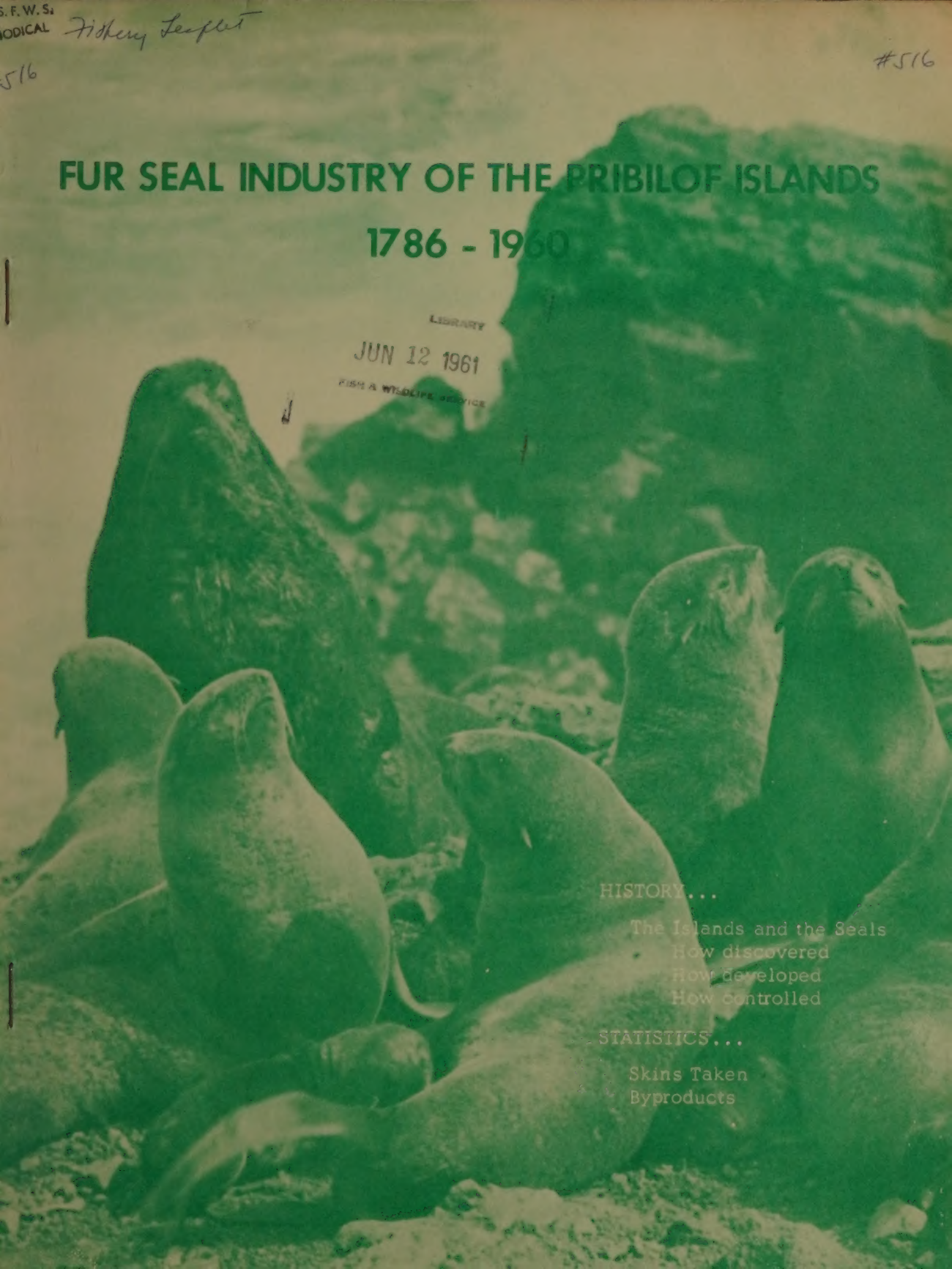
S. F. W. S.
ODICAL Fishery Leaflet
516
#516

FUR SEAL INDUSTRY OF THE PRIBILOF ISLANDS

1786 - 1960

LIBRARY
JUN 12 1961
FISH & WILDLIFE SERVICE



HISTORY...

The Islands and the Seals
How discovered
How developed
How controlled

STATISTICS...

Skins Taken
Byproducts

TAKE AND AVERAGE VALUE OF PRIBILOF ISLANDS FUR SEAL SKINS, 1956-1960

Year	Male		Female		Total
	Number	Average Value 1/	Number	Average Value 1/	Number
1956.	95,849	$99.95	26,977	-	122,826
1957.	46,195	68.22	47,423	-	93,618
1958.	47,860	85.28	31,059	-	78,919
1959.	30,176	102.20	27,634	-	57,810
1960.	36,320	103.31	4,296	$ 35.69	40,616

1/ Average value received per skin at fall auction.

Note: Large numbers of female fur-seal skins have been taken since 1955. Few were sold prior to 1960. At the fall auction in 1960, a total of 6,338 sheared, female skins were sold at an average of $35.69 per skin. Studies are being continued as to the best method of disposal of these skins.

—

Cover. . . . . A small fur seal harem

United States Department of the Interior, Stewart L. Udall, Secretary
Fish and Wildlife Service, Clarence F. Pautzke, Commissioner
Bureau of Commercial Fisheries, Donald L. McKernan, Director

FUR SEAL INDUSTRY OF THE PRIBILOF ISLANDS 1786 - 1960

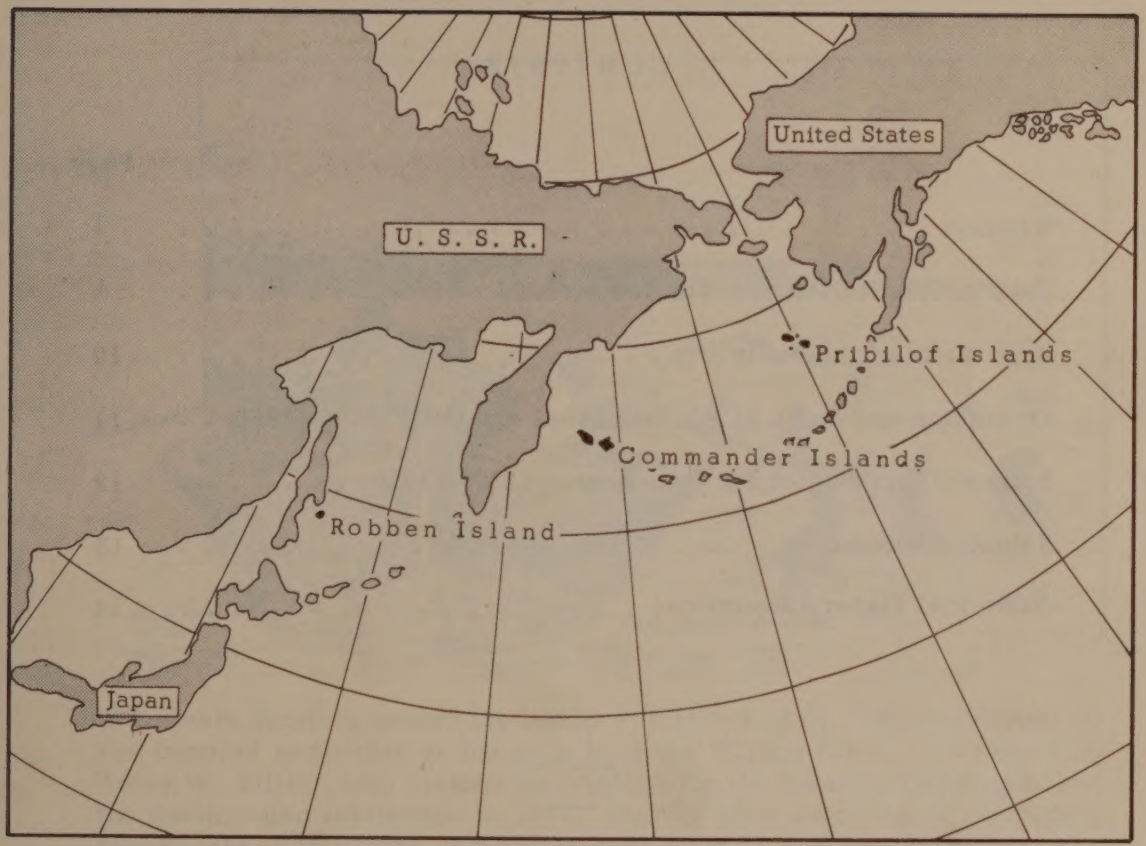
by

Francis Riley

Fishery Marketing Specialist, Branch of Statistics
Division of Resource Development

Fishery Leaflet 516
Washington 25, D. C.
May 1961

Harems on the Pribilof Islands

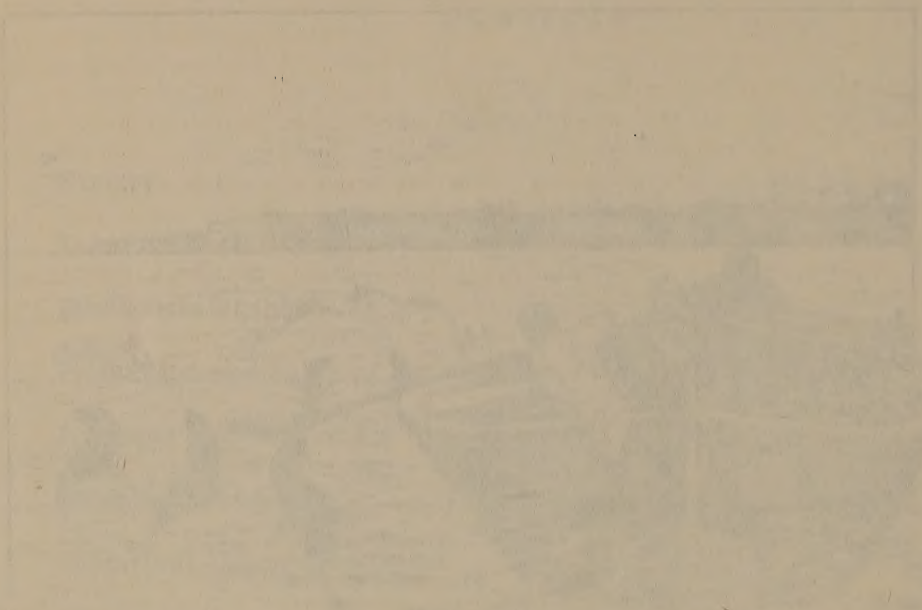


Breeding grounds of the northern fur seals: Robben Island (Kaihyōtō or Tyuleniy Island) off Sakhalin; the Commander Islands (Bering Island and Medny or Copper Island) at the Soviet end of the Aleutian chain; and the Pribilof Islands -- St. Paul Island, St. George Island, Otter Island, Walrus Island, and Sea Lion Rock.

CONTENTS

	Page
History	1
Take of Pribilof Islands Fur Seals, 1786 - 1960	4
Byproducts of the Seals	10
Production and Sales of Fur Seal Meal and Oil, 1919 - 1960	11
Shipment and Sale of Fur Seal Bones, 1917 - 1919	12
Selected References	13
Historical Fishery Statistics	14

"Fur seals sporting around the baidar -- Natives of St. Paul lightering off the bundled sealskins to the ship from the Village Cove." A sketch by Henry W. Elliott, who visited the Pribilofs for the Treasury Department and the Smithsonian Institution in 1872, shortly after purchase of the islands from Russia. The baidar, or bidarrah, was made of sea lion skins; canvas-covered bidarrahs are still used in ship-to-shore ferrying.



HISTORY

(The Islands and the Seals)

The Pribilof Islands lie about three hundred miles off the mainland of Alaska in the heart of the Bering Sea. Surrounded in the summer months almost constantly by dense fog and drizzling mists, they are the most insignificant landmarks known to that body of water. The islands are the natural retreat and only breeding ground of the Alaska fur seal herd. There, on the rocky beaches, the young are born each summer. In the fall, after the breeding season is over, the seals leave the islands and return to the sea.

Other fur seals, also belonging to the genus Callorhinus, are found on a few islands off Russia and Japan. To a limited extent the fur seals belonging to the genus Arctocephalus are found in cold areas of the southern hemisphere. It is generally believed that the Alaska fur seal herd comprises over 80 percent of all existing fur seals in the world today.

The nature and pattern of the fur seals' habits are such that a program of wise utilization can be readily devised and practiced. The Alaska fur seals come ashore only on the Pribilof Islands in late May and early June before the snow has melted. They are highly polygamous animals -- the sexes are born in equal numbers -- and it is possible to take the surplus males for their skins without reducing the growth of the herd. The story of the Pribilof Islands fur seal herd is one of adventure and international diplomacy. It is a heartening account of cooperation among nations and an outstanding example of wildlife conservation.

The Alaska fur seal was not valued highly by Russian fur-gatherers as they prospected for and exploited the sea-otter herds in the Aleutian Archipelago. The seal herd had been noticed as it went north in the spring and returned south in the fall through the passes and channels of the Aleutian chain. However, as the sea otter reached a point of extermination, the fur seal became the source of much speculation as to its breeding habits and where it spent its time on land. In 1786, after more than eighteen years of search by hardy Russian navigators, the land home of the fur seal was found with the discovery of the island of Saint George (Pribilof group) by Gehrman Pribylov. He took possession of the land in the name of Russia and endowed it with the name of his sloop, the Saint George. It was estimated that the seal herd (at the time of the Russian discovery) contained at least 2 1/2 million animals. Almost immediately the teeming rookeries of the Pribilofs began to yield sealskins to the fur markets of the world.

A few years before Pribylov's discovery, adventurous mariners from New England and Europe, in their search for oils to replace the rapidly declining supply of whale oil, had investigated the commercial possibilities of the great herds of fur seals inhabiting the southern seas. In the fifty years that followed, fur seal rookeries on countless islands were destroyed as fast as they were discovered. Every seal that could be obtained was killed. Literally millions of pelts were delivered into the China trade. The sealing business was profitable but the period of prosperity did not last. The huge populations of fur seals south of the equator were rapidly annihilated with the exception of only a few small herds that still exist in the southern hemisphere.

The early exploration of the Alaska fur seal herd followed the same destructive course as that in the southern seas. Russian sealing operations were wasteful and largely unrecorded. There were no restrictions on the number of seals killed; no attempts made to protect females. Operations were conducted in this manner until 1799. In that year the seal islands passed into the control of the Russian-American Company. It remained in charge until Russia sold Alaska

to the United States.

The records of the Russian-American Company's early operations are imperfect but it is known that overseers recognized the dangers of over-exploitation. At various times they placed temporary bans on killings. They were, however, inadequate and by 1834 the herd had dwindled to the lowest point while under Russian jurisdiction. As a result, a stringent ban on killing was applied by Russia in 1835. After a rest of seven years, when fewer than 10 thousand skins were taken annually, the kill was gradually increased under controlled conditions. Only males were taken -- the killing of females was forbidden.

After the initial period of unrestricted killing, the take of seals by the Russians appears to have been conservative. Although complete data is not available, it has been estimated that more than 2 1/2 million pelts were taken between the time the islands were discovered and 1867 -- the year in which Alaska was annexed to the United States.

During the first year (1868) of American occupation, various independent parties took 140 thousand seals. In the following year, before the islands were set aside by the United States Government as a special reservation for the protection of the animals, 86 thousand seals were killed. A year later the United States Treasury Department was authorized to lease exclusive rights to take seals on the islands, with stipulations that no females were to be killed.

During the next 40 years of ownership by the United States, the sealing privilege on the Pribilofs was leased to private companies (The Alaska Commercial Company and the North American Commercial Company). More than 2 million fur seal skins were taken. From 1870 to 1889, the Alaska Commercial Company had little difficulty in getting its annual quota of 100 thousand skins. However, although sealing operations on the islands were carefully regulated, pelagic sealing (the killing of seals at sea) was not regulated. By 1889 pelagic sealing was taking a heavy and damaging toll which threatened to exterminate the Alaska fur seal herd.

Fur seals are vulnerable to capture at sea as well as on land. The Indians of the northwest coast of America from time immemorial followed the custom of spearing fur seals from their canoes as they passed along the shore. However, the catch was small and had no material effect on the fur seal herd. The animals were taken primarily for food and clothing. Between 1871 and 1878, this fishery was expanded. By 1879, schooners averaging 70 tons and fitted out to transport hunters and canoes to the sealing grounds, engaged in the fur-seal harvest.

Sealing on land was controlled but at sea all animals became targets. The result was the loss of many injured animals and others that had been killed outright sank and were never retrieved. More important was that a high percentage of the take were females whose death resulted in the loss of their unborn pups or starvation of new-born pups left on land. Pelagic sealing greatly disturbed the pattern of production to which the conservation of the herd had been tailored; the slaughter was to end only when the herd had been reduced to such a low point that pelagic sealing as well as land killing was unprofitable. Pelagic sealing on a commercial scale reached its peak in 1894 when nearly 62 thousand skins were taken. Between 1868 and 1909 almost a million skins were taken on the high seas.

Pelagic sealing was an extremely wasteful method of taking seals. For many years there was no way to prevent the operations -- it was carried on in waters beyond the control of the countries possessing the rookeries. The United States recognized that the wasteful killing at sea was greatly against the interests of the herd and sought to establish jurisdiction over pelagic sealing in the Bering Sea. A number of

the sealing vessels which operated in those waters were seized and confiscated by the United States. The action resulted in a controversy with Great Britain since the pelagic fleet was largely of Canadian registry. In 1892 the entire matter was remanded to a tribunal of arbitration. This body, which met in Paris in 1893, denied the United States authority to exercise jurisdiction over the Pribilof Islands' fur seals when such animals were more than 3 miles from shore. Although other regulations were formulated for the protection of the animals, they later proved to be inadequate and the Pribilof herd continued to decline.

In 1897 Congress enacted a law forbidding American citizens from engaging in pelagic sealing at any time or place. In 1910, the United States Government assumed full charge of sealing operations on the Pribilof Islands following expiration of the leasing program. By then, the once great herd had been reduced to less than 150 thousand animals.

After extended diplomatic negotiations, timely and concerted action by conservationists of four countries (United States, Great Britain, Japan, and Russia) finally succeeded in getting their countries to accept the terms of the North Pacific Fur Seal Convention of 1911. Pelagic sealing was prohibited except by aborigines using primitive weapons. Each country owning fur seal rookeries agreed to share 30 percent of the annual take of sealskins -- Canada and Japan each to receive 15 percent of the sealskins from the Pribilof Islands and 15 percent of those from the Commander Islands, and Canada, Russia, and the United States each to receive 10 percent of the pelts from Robben Island. The convention remained in force for 30 years until terminated by Japan in 1941. From 1942 to 1957 the Pribilof herd was protected by a provisional agreement between Canada and the United States and in 1957 a new North Pacific Fur Seal Convention, similar in basic provisions to the 1911 convention, was concluded by Canada, Japan, the Union of Soviet Socialists Republic, and the United States.

The convention of 1911 provided, for the first time, a sound basis for the management of the North Pacific fur seals. Since 1911 the Alaska fur seal herd has steadily increased from less than 150 thousand seals to its present level of about 1 1/2 million animals -- one of the most outstanding accomplishments in the conservation of wildlife. Since 1939 the herd has sustained an average annual yield of about 69 thousand fur seal skins. The future of the Alaska fur seal herd seems assured as long as the countries of the world continue to work together in the solution of problems peculiar to such migratory wildlife populations.

Fur Seal Pups

TAKE OF PRIBILOF ISLANDS FUR SEALS, 1786-1960

Year	From Pribilof Islands	From pelagic and other sources	Total
	Number	Number	Number
1786 - 1796	1/ 2/ 417,758	(3)	417,758
1797 - 1816	4/ 844,890	(3)	844,890
1817	4/ 5/ 60,188	(3)	60,188
1818	4/ 5/ 59,856	(3)	59,856
1819	4/ 5/ 52,224	(3)	52,224
1820	4/ 5/ 50,220	(3)	50,220
1821	4/ 5/ 44,995	(3)	44,995
1822	5/ 36,469	(3)	36,469
1823	5/ 29,873	(3)	29,873
1824	5/ 25,400	(3)	25,400
1825	5/ 30,100	(3)	30,100
1826	5/ 23,250	(3)	23,250
1827	5/ 19,700	(3)	19,700
1828	5/ 23,228	(3)	23,228
1829	5/ 20,811	(3)	20,811
1830	5/ 18,034	(3)	18,034
1831	5/ 16,034	(3)	16,034
1832	5/ 16,446	(3)	16,446
1833	5/ 16,412	(3)	16,412
1834	5/ 15,751	(3)	15,751
1835	5/ 6,580	(3)	6,580
1836	5/ 6,590	(3)	6,590
1837	5/ 6,802	(3)	6,802
1838	6/ 6,000	(3)	6,000
1839	6/ 6,000	(3)	6,000
1840	6/ 8,000	(3)	8,000
1841	6/ 8,000	(3)	8,000
1842	6/ 10,370	(3)	10,370
1843	6/ 11,240	(3)	11,240
1844	6/ 11,924	(3)	11,924
1845	6/ 13,637	(3)	13,637
1846	6/ 15,070	(3)	15,070
1847	6/ 17,703	(3)	17,703
1848	6/ 14,650	(3)	14,650
1849	6/ 21,450	(3)	21,450
1850	6/ 6,770	(3)	6,770
1851	6/ 6,564	(3)	6,564
1852	6/ 6,725	(3)	6,725
1853	6/ 18,035	(3)	18,035
1854	6/ 26,146	(3)	26,146
1855	6/ 8,585	(3)	8,585

See footnotes at end of table. (Continued on next page)

TAKE OF PRIBILOF ISLANDS FUR SEALS, 1786 - 1960 - Continued

Year	From Pribilof Islands	From pelagic and other sources	Total
	Number	Number	Number
1856	6/ 23,550	(3)	23,550
1857	6/ 21,082	(3)	21,082
1858	6/ 31,810	(3)	31,810
1859	6/ 22,000	(3)	22,000
1860	6/ 21,590	(3)	21,590
1861	7/ 29,699	(3)	29,699
1862	8/ 20,000	(3)	20,000
1863	8/ 25,000	(3)	25,000
1864	8/ 26,000	(3)	26,000
1865	8/ 40,000	(3)	40,000
1866	8/ 42,000	(3)	42,000
1867	8/ 48,000	(3)	48,000
1868	9/ 140,000	4,367	144,367
1869	9/ 85,901	4,430	90,331
1870	9/ 23,773	8,686	32,459
1871	9/ 102,960	16,911	119,871
1872	9/ 108,819	5,336	114,155
1873	9/ 109,117	5,229	114,346
1874	9/ 110,585	5,825	116,410
1875	9/ 106,460	5,033	111,493
1876	9/ 94,657	5,515	100,172
1877	9/ 84,310	5,210	89,520
1878	9/ 109,323	5,540	114,863
1879	9/ 110,511	8,557	119,068
1880	9/ 105,718	8,418	114,136
1881	9/ 105,063	10,382	115,445
1882	9/ 99,812	15,581	115,393
1883	9/ 79,509	16,587	96,096
1884	9/ 105,434	16,971	122,405
1885	9/ 105,024	23,040	128,064
1886	9/ 104,521	28,494	133,015
1887	9/ 105,760	30,628	136,388
1888	9/ 103,304	36,389	139,693
1889	9/ 102,617	29,858	132,475
1890	9/ 28,859	40,814	69,673
1891	9/ 14,406	59,568	73,974
1892	9/ 7,509	46,642	54,151
1893	9/ 7,390	30,812	38,202
1894	9/ 15,033	61,838	76,871
1895	9/ 14,846	56,291	71,137
1896	9/ 30,654	43,917	74,571
1897	9/ 19,200	24,332	43,532

See footnotes at end of table. (Continued on next page)

TAKE OF PRIBILOF ISLANDS FUR SEALS, 1786 - 1960 - Continued

Year	From Pribilof Islands	From pelagic and other sources	Total
	Number	Number	Number
1898	9/ 18,047	28,552	46,599
1899	9/ 16,812	34,168	50,980
1900	10/ 22,470	35,191	57,661
1901	10/ 22,672	24,050	46,722
1902	10/ 22,386	22,812	45,198
1903	10/ 19,292	27,000	46,292
1904	10/ 13,128	29,006	42,134
1905	10/ 14,368	25,320	39,688
1906	10/ 14,476	21,236	35,712
1907	10/ 14,964	16,036	31,000
1908	10/ 14,996	18,151	33,147
1909	14,368	14,139	28,507
1910	13,586	795	14,381
11/ 1911	12,006	139	12,145
1912	3,764	12/ 205	3,969
13/ 1913	2,406	495	2,901
1914	2,735	366	3,101
1915	3,947	439	4,386
1916	6,468	629	7,097
1917	8,170	737	8,907
1918	34,890	483	35,373
1919	27,821	626	28,447
1920	26,648	2,343	28,991
1921	23,681	3,115	26,796
1922	31,156	2,563	33,719
1923	15,920	5,818	21,738
1924	17,219	3,285	20,504
1925	19,860	6,509	26,369
1926	22,131	3,899	26,030
1927	24,942	2,301	27,243
1928	31,099	3,902	35,001
1929	40,068	4,969	45,037
1930	42,500	3,984	46,484
1931	49,524	1,649	51,173
1932	49,336	1,938	51,274
1933	54,550	2,076	56,626
1934	53,468	290	53,758
1935	57,296	980	58,276
1936	52,446	1,927	54,373
1937	55,180	2,832	58,012
1938	58,364	1,551	59,915
1939	60,473	637	61,110

See footnotes at end of table. (Continued on next page)

TAKE OF PRIBILOF ISLANDS FUR SEALS, 1786 - 1960 - Continued

Year	From Pribilof Islands	From pelagic and other sources	Total
	Number	Number	Number
1940	65,263	14/ 65	65,328
1941	95,013	21	95,034
1942	15/ 150	-	150
1943	16/ 117,184	-	117,184
1944	47,652	91	47,743
1945	76,964	39	77,003
1946	64,523	417	64,940
1947	61,447	186	61,633
1948	70,142	244	70,386
1949	70,990	90	71,080
1950	60,204	333	60,537
1951	50,771	735	51,506
1952	63,922	28	63,950
1953	66,669	54	66,723
1954	63,882	-	63,882
1955	65,453	-	65,453
1956	122,826	-	122,826
1957	93,618	-	93,618
1958	78,919	-	78,919
1959	57,810	-	57,810
1960	40,616	-	40,616

1/ Berg's Chronological History, 1820, cited in Vol. I, Appendix to Case of United States, Paris Tribunal of Arbitration, reprint 1895, Page 125. 2/ Attempts to obtain authentic records on the number of fur seals slain upon the Pribilof Islands prior to 1868 was a partial failure. Counts of shipments of skins due to be exported to China or Russia were made by the Russian Company when the skins were shipped to Sitka. Beyond this, there were only a few records on the number of animals consumed in Alaska, lost through wastefulness and crude methods of curring skins, or destroyed in the warehouses. This confuses a correct determination as to the sum totals and the result probably represents not more than one-half the seals killed during these years. 3/ Fur seals taken from areas other than on the Pribilof Islands are included with those taken on the Islands. 4/ Elliott's Monograph, reprint Seal and Salmon Fisheries, Part 3, Page 115, gives the number of seals killed from 1797 to 1821 as 1,112,373, after deducting 5,000 skins annually for skins shipped from the Commander Islands. The number 844,890 is obtained by deducting from the above number the seals stated by Vemaminof to have been killed during the years 1817 to 1821. 5/ Vemaminof, Notes on Islands of Unalaska District, Part 2, Table 6, cited in Case of United States, Tribunal of Arbitration at Paris, reprint 1895, Page 126. 6/ Report of H. H. McIntyre, 1869, (House Ex. Doc. No. 36, 41st. Congress, 2nd Session.). 7/ Report of British Commissioners, Fur-Seal Arbitration,

(Continued on next page)

reprint 1895, Vol. 6, Page 109. 8/ The Fishery Industries of the United States, 1880 by G. Brown Goode (Henry W. Elliot), Section V, History and Methods, Text Volume 2, Page 361-362. 9/ The Commercial Fisheries of Alaska in 1905. Bureau of Fisheries Document No. 603, Page 32. 10/ The Fur-Seal Fisheries of Alaska in 1909 by Walter I. Lembkey, Bureau of Fisheries Document No. 735. 11/ Convention for the Protection and Preservation of the Fur Seals and Sea Otters was signed on July 7, 1911. 12/ By 1912, illegal pelagic sealing at the expense of the Pribilof Islands herd had entirely ceased. However, the Convention allowed, under primitive conditions, Indians, Aleuts, or other aborigines dwelling on the coasts of America to take fur seals. The take of fur seal skins from pelagic and other sources from 1912 to 1953 was done under these conditions. 13/ The Act of Congress approved August 24, 1912, provided that "all killing of fur seals on the Pribilof Islands, or anywhere within the jurisdiction of the United States in Alaska, shall be suspended for a period of five years, and shall be, and is hereby, declared to be unlawful." In strict compliance with that provision of law, no seals were killed except such as was necessary for food for the natives. 14/ Following 1940, interest in pelagic sealing dwindled. No skins were taken in 1942 and 1943 when employment was at a high point and military restriction on offshore activities were in effect. Since 1954 there has been no recorded commercial pelagic sealing carried on at the expense of the Pribilof Islands' herd. 15/ Due to the war situation in the Alaska and Aleutian Islands area, all inhabitants of the Pribilof Islands were removed by order of the military authorities. When the evacuation was ordered, sealing operations were just getting under way. The take of skins was very small. 16/ This figure represented the second largest kill under controlled conditions in the history of the Islands. In 1943, the normal number of seals were taken and also those animals which would have been taken in 1942 if normal sealing operations had been carried on. Note: Data for 1909-1959 from The Fisheries of Alaska in 1909; Alaska Fisheries and Fur Industries for the year 1910 through 1919; Alaska Fishery and Fur-Seal Industries for the years 1920 through 1955; and Fishery Statistics of the United States, 1956-1960. These are a series of Bureau of Fisheries documents, administrative reports, and statistical digests assembled and published by the Bureau of Commercial Fisheries and their predecessor organizations.

Fur Seal (bull)

TAKE OF PRIBILOF ISLANDS FUR SEALS, 1820 - 1960

Continued

NOTE:--THE STATISTICAL TABLE ON PAGES 5 TO 9 IS THE SOURCE OF DATA FOR THIS PRESENTATION. IMPORTANT FACTORS IN READING THIS GRAPH ARE THAT ALASKA WAS ANNEXED TO THE UNITED STATES IN 1867; THE CONVENTION FOR THE PROTECTION AND PRESERVATION OF THE FUR SEALS WAS SIGNED IN 1911; AND THAT THE TAKE OF SKINS IN 1942 WAS VERY SMALL WHEN MILITARY RESTRICTIONS ON THE PRIBILOF ISLANDS WERE IN EFFECT.

BYPRODUCTS OF THE SEALS

After the United States Government assumed full charge of sealing operations on the Pribilof Islands in 1910, efforts were made to utilize waste products of the fur-seal industry. Fur seal carcasses, for the most part, were abandoned to the elements prior to World War I. Natives on the islands used some of the seal meat as food and other parts of the carcasses were utilized in the making of clothing. The abandoned fur seal carcasses were also an important source of food for blue fox populations on the islands.

World War I stimulated efforts to utilize waste products of the industry. Seal meat was preserved in salt for experimental use by the Department of Agriculture, the gullets or throats of the animals were used experimentally in fine leather work, oil and gelatine were extracted from carcasses, tests were made of the suitability of intestines for sausage casings, and fur seal bone deposits from the killing fields were collected for chemical analysis. However, little was actually achieved as a result of this experimental work although about 472 thousand pounds of fur seal bones were shipped to the United States and sold for the manufacture of fertilizer.

In 1918, a small byproducts plant was built by the Government for the purpose of producing additional oil from which glycerine, an essential material for munitions manufacture, could be prepared. This plant was operated on a limited basis from 1919 through 1924, and for a short period in 1928. Operations were restricted by a shortage of coal for fuel. After 1920, the price of meal and oil declined to the point where operation of the plant was not economical. During its period of operation, the plant produced about 82 thousand pounds of meal and 34 thousand gallons of oil. Although there were some sales, over half of the meal was used as fox food on the islands and over two-thirds of the oil was used in the tanning of sealskins and in the preparation of fox food.

In 1930 the byproducts plant was modernized and enlarged. This new installation was completed in 1931 but, due to low oil and meal prices, did not operate until 1935. The plant has since been used each season, except in 1942 when the Pribilof Islands were evacuated for military reasons.

During World War II, the demand for meal and oil greatly increased. However, the plant was no longer adequate to utilize all of the available waste products because the annual take of sealskins had increased about 50 percent between 1930 and 1940. Plans were made to double the capacity of the plant, but due to wartime shortages and other related reasons, the expansion was not completed until 1948.

Since 1948 the plant has produced an average annual yield of about 733 thousand pounds of seal meal and 48 thousand gallons of oil. From 1935 to 1939 most of the fur seal meal produced each year was used as fish food in hatcheries operated by the U.S. Fish and Wildlife Service. However, in recent years most of the meal has been sold for use as a protein ingredient in poultry feed. A small quantity has been used experimentally in the feeding of fur-bearing animals and small amounts have also been sold to state fish hatcheries. Since 1935, most of the fur seal oil has been sold for the account of the Government for use in leather tanning.

PRODUCTION AND SALES OF FUR SEAL MEAL AND OIL, 1919 - 1960

Year	Quantity produced		Quantity sold	
	Meal	Oil	Meal	Oil
	Pounds	Gallons	Pounds	Gallons
1919	20,568	3,000	20,568	3,000
1920	19,000	1,853	15,393	-
1921	8,759	5,271	-	-
1922	1,935	8,546	-	-
1923	8,703	5,925	-	-
1924	19,014	6,870	-	-
1925	(1)	(1)	1,019	-
1926	(1)	(1)	3,518	-
1927	(1)	(1)	-	-
1928	4,215	2,479	-	-
1929-1934	(1)	(1)	-	-
1935	155,254	18,994	-	18,238
1936	276,040	25,252	-	23,669
1937	330,265	29,830	-	29,341
1938	357,222	30,587	-	29,865
1939	502,914	32,809	338,421	27,966
1940	618,762	30,605	569,536	24,405
1941	747,546	54,610	746,457	39,610
1942	(1)	(1)	-	-
1943	782,000	75,259	244,679	94,482
1944	484,776	32,976	835,470	32,976
1945	547,969	41,189	547,969	41,189
1946	528,040	33,912	528,040	33,912
1947	606,514	39,746	606,514	39,746
1948	686,089	48,592	684,089	48,592
1949	694,350	49,253	693,350	49,253
1950	673,558	42,013	672,000	41,689
1951	702,616	39,867	702,000	39,867
1952	729,806	35,029	729,806	35,029
1953	705,935	46,800	705,935	46,800
1954	661,131	40,220	661,131	40,220
1955	642,876	40,509	642,876	40,509
1956	1,252,169	88,270	1,252,169	88,270
1957	748,277	53,291	748,277	53,291
1958	636,000	52,908	636,000	52,908
1959	659,167	39,307	659,167	39,307
2/ 1960	333,038	22,044	333,038	22,044

1/ Plant not operated. 2/ Preliminary.

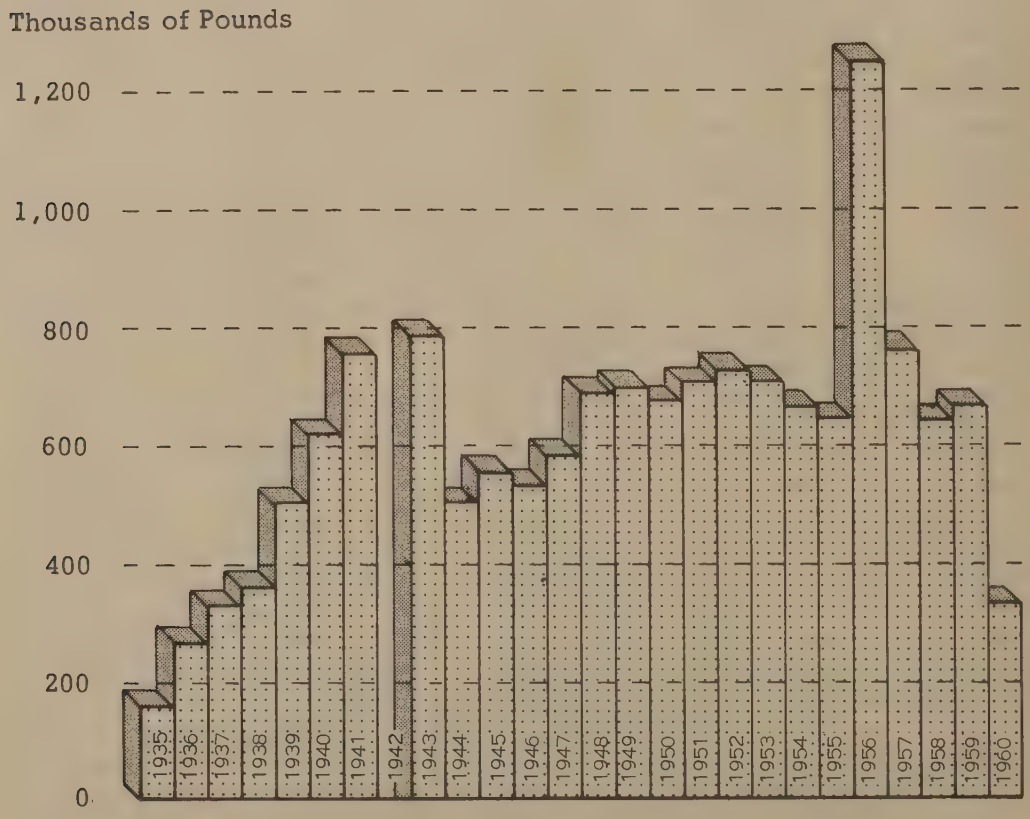
Source: Data for 1919-1934 from Alaska Fisheries and Fur Industries and Alaska Fishery and Fur-Seal Industries. These are a series of Bureau of Fisheries documents and administrative reports. Data for 1935-1949 from Fishery Leaflet 380 by Ralph C. Baker. Data for 1950-1959 from Alaska Fishery and Fur-Seal Industries and Fishery Statistics of the United States. These are a series of statistical digests assembled and published by the Bureau of Commercial Fisheries and and its predecessor organizations.

SHIPMENT AND SALE OF FUR SEAL BONES, 1917 - 1919

Year of Shipment	Net Weight In Pounds	Receipts Less Expense of Sale
1917	32,170	$ 322
1918	338,900	4,532
1919	101,084	1,447
Total	472,154	6,301

Note: Includes old sea lion bones.
Source: Alaska Fisheries and Fur Industries, Fishery Document No. 847, 872, and 891.

PRODUCTION OF FUR SEAL MEAL, 1935 - 1960



SELECTED REFERENCES

Baker, Ralph C.
1950 Byproducts of the Government-Operated Alaska Fur-Seal Industry. Fishery Leaflet No. 380.

Baker, Ralph C.
1957. Fur Seals of the Pribilof Islands. Conservation in Action No. 12.

Cobb, John N. The Commercial Fisheries of Alaska. Bureau of Fisheries
1905. Document No. 603.

Goode, G. Brown (Henry W. Elliot)
1880. The Fishery Industries of the United States. Section V, History and Methods, Text Volume 2.

Lembkey, Walter I.
1909. The Fur-Seal Fisheries of Alaska. Bureau of Fisheries Document No. 735.

Kenyon, Karl W., and Victor B. Scheffer
1954. A Population Study of the Alaska Fur-Seal Herd. Special Scientific Report No. 12.

Sims, Edwins W.
1906. (Solicitor of the Department of Commerce and Labor) Report on the Alaskan Fur-Seal Fisheries, 1906.

Tressler, Donald K., and James McW. Lemon
1951. Marine Products of Commerce. Chapter 34: Seal Fisheries (by Seton H. Thompson)

U.S. Fish and Wildlife Service (Various Authors)

1909. The Fisheries of Alaska in 1909.

1910-1919 Alaska Fisheries and Fur Industries.

1920-1955 Alaska Fisheries and Fur-Seal Industries.

1956-1960 Fishery Statistics of the United States. These are a series of Bureau of Fisheries documents, administrative reports, and statistical digests assembled and published by the Bureau of Commercial Fisheries and its predecessor organizations.

HISTORICAL FISHERY STATISTICS

Statistics of the fisheries of the United States are necessary for the best use of the Nation's aquatic resources. As series of data for extended periods of time are accumulated, the information becomes increasingly more valuable in indicating trends in the supply and utilization of fishery products. The extent to which these data are used is frequently dependent upon the ready availability of needed information to researchers, management officials, and members of the fishing industry.

Periodically there are published in Fishery Statistics of the United States historical data for each state on the catch of important species. The most recent publication of these data was in Statistical Digest No. 43 entitled Fishery Statistics of the United States, 1956

The Bureau of Commercial Fisheries has in its files and in various Bureau reports or publications of other organizations a large volume of historical data. These statistics would be of considerable use to researchers and others interested in the fisheries. Unfortunately, few know of these records. To make the series readily available to researchers and others interested in the fisheries, a section entitled "Historical Fishery Statistics" has been published, since 1951, in Fishery Statistics of the United States. The titles of the series published, and the identifying number of the Digest in which each appears, follows:

Series	Published in Statistical Digest
Menhaden Fishery, 1873 - 1951	No. 30
Oyster Fishery, 1880 - 1952	No. 34
Pacific Sardine Fishery, 1915 - 1953	No. 36
Atlantic Ocean Perch Fishery, 1930 - 1954	No. 39
Pacific Herring Fishery, 1881 - 1955	No. 41
United States Haddock Fishery, 1880 - 1956	No. 43
United States Tuna Fishery, 1911 - 1957	No. 44
United States Atlantic Cod Fishery, 1893 - 1958	No. 49
Fur Seal Industry of the Pribilof Islands, 1786 - 1959	No. 51

INT.DUP.,D.C.61-92989